

*REMARKS/ARGUMENTS*

In response to the Office Action mailed February 22, 2008, Applicant amends his application and requests reconsideration. Claims 32-34 have been added and no claims are cancelled so that claims 25-34 are now pending.

Applicant's representative strongly disagrees with the Examiner's position that a system that "is capable of performing" some function pre-empts the potential patenting of an invention that might use that apparatus, but which had not been conceived until after the system became available. Otherwise, any invention that employs a programmed computer is presumptively unpatentable even if the invention had not been conceived until well after the computers used in the system had been known. The view expressed in the Office Action is inconsistent with the existence of statutes permitting patenting.

Applicant's representative does not agree with the claim interpretation made, ignoring certain functional limitations in the claims.<sup>1</sup> However, considering the commentary from the Examiner appearing in paragraph 7 at page 4 of the Office Action, the claims have been amended to describe the computers mentioned in the claims as being "programmed to" perform various functions. In the view of Applicant's representative, this language is far more definite and desirable than language such as "configured to" or "adapted to." The latter phrase, which seems equivalent to the former phrase, has long been treated in U.S. prosecution practice as not connoting any structure. It is presumed, based upon the amendments made, that patentable weight will now be accorded all of the language of all of the claims.

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<sup>1</sup> The Court of Appeals for the Federal Circuit has again recently confirmed that functional language in claims not in "means plus function" format may properly be employed to define an invention and limit claims. See *Microprocessor Enhancement Corporation v. Texas Instruments Incorporated*, No. 2607-1249, slip op. at page 13 (Fed. Cir. April 1, 2008), citing *K-2 Corp. v. Solomon S.A.*, 52 USPQ2d 1001 (Fed. Cir. 1999).

Claim 25 is the sole pending independent claim. The invention has been discussed in prior Responses, but perhaps a précis of important features of the invention may be useful. The invention is directed to a positional information management system that, fundamentally, allows a customer of a hotel to determine easily the location of an article he has brought into the hotel and to do so at multiple locations throughout the hotel. In the system, a tag is attached to an article in the hotel, for example, an article belonging to a guest at the time the guest checks into the hotel. The tag includes an integrated circuit that produces a tag identification indication. Proximity detectors, which detect the tag ID when the tag is within a specific, respective detection range of a proximity detector, are distributed throughout the hotel facility. Thus, as the article is moved throughout the hotel, various proximity detectors detect the article through the tag. The detectors are networked to a server which records each detection of a tag, with an indication of the time and the particular proximity detector making the detection. Essentially, the data collected is sufficient to establish a map of time and location with respect to the article.

As in all modern hotels, when the guest checks in, the guest is issued a card that is typically employed as a room key. In the invention, there is a house card server that tracks the use of such a house card, which might be used to pay for services within the hotel as well as to function as a room key. Terminals for use of that house card are located throughout the hotel so that the guest can purchase services at various locations within the hotel as well as potentially use the card as a room key.

An important part of the invention is the ability of the guest to track his tagged article and/or to locate that tagged article simply by using his house card and any of the house card terminals, anywhere within the hotel facility. As explained at the end of claim 25, the positional information management server is programmed so that the location of the tagged article can be determined by the reading of a house card at any of the house card terminals, authentication of that house card by the hotel server, and input to that card terminal of the tag ID associated with the house card that has been read. In response to that input information and the authentication, a search is made by

the positional information management server and the results of that search are sent to the card terminal where the holder of the house card is waiting to receive the response. Amended claim 25 makes clear, by including a limitation taken from dependent claim 28, that each of the proximity detectors has a respective range of detection for the tag. Claim 26 still specifies that the tag is a detachable sticker, meaning that it is simple to apply and remove the tag to essentially any article brought into the hotel by a guest. The other pending claims are all dependent claims and express further features of the invention.

Claims 25-31 were rejected as unpatentable over Chung (Published U.S. Patent Application 2001/0034623) in view of Ulrich et al. (U.S. Patent 6,825,763, hereinafter Ulrich). This rejection is respectfully traversed.

In general, Chung concerns the issuance to an individual of a card that contains information that permits tracking of the individual by location and time of transactions employing the card. An example is a card used as a key for a hotel room in conjunction with an electronic lock. The same card may be used in purchasing goods and services, providing additional tracking information for the movement and activities of the person to whom the card has been issued. In the rejection, attention was directed to paragraph [0024] of Chung which describes a network arrangement providing the opportunity for tracking transactions employing the card. Other cited paragraphs of Chung describe registration of an individual with a card, the making of reservations, and the use of a so-called loyalty card. The card is not only a guest room card but also an access card for various otherwise unavailable facilities of a hotel complex. The paragraphs of Chung describing a personnel management system seem significantly less pertinent to the presently claimed invention than the other cited parts of Chung.

It is conceded that Chung does not describe the attachment of tags to articles nor the ability to track the articles throughout a facility, like a hotel. For that reason, there are no proximity detectors that track the movement of persons or goods throughout the hotel facility in Chung. Accordingly, Chung can only describe the

portions of claim 25 related to the issuance of a house card to a customer for payment for hotel services, the house card server, and a plurality of card terminals. All other parts of the claimed invention require the proximity detectors, the tag attached to an article, maintenance of a record correlating a tag and an article as well as the customer to whom a house card has been issued, and the searching function, among other features.

Ulrich fails to disclose features of the invention, as defined by claim 25, that are not described by Chung. Ulrich is directed to a web-based system for tracking the movement of people and/or objects within a defined area. Personnel are tracked by badges they wear and articles are tracked by tags. Both the badges and the tags emit signals that are detected by receiver nodes. Signals from the receiver nodes are collected in a complex network of routers and hubs. There are no cards that are employed by personnel with distributed card readers, like the house card of the invention or the card of Chung. Access to information collected from the badges and tags is exclusively provided through the Internet or an Intranet using a browser program.

In rejecting the claims, the Examiner stated that it would have been obvious to have modified Chung with Ulrich to include the positional information server and tracking system of Ulrich. Accepting, solely for the sake of argument in this Response, that assertion, the result is still not *prima facie* obviousness as to any pending claim. Nowhere in either Chung or Ulrich is there any interactive arrangement involving the distributed card terminals, and use of any of those terminals with an authenticated house card to search the location information in order to determine the location of the specific article associated with the house card. Chung may describe distributed card terminals and their use in transactions and in gaining access to specific areas, but it is acknowledged that Chung includes no function with respect to tags or tracking of tagged articles.

Ulrich does provide a system for tracking articles to which tags are affixed, but not by the owner of an article at any particular location employing a card terminal.

There are no house cards or their equivalent in Ulrich. There is no suggestion that the badges used to track individuals in Ulrich could function as house cards or could be used by a person wandering through the facility to try to locate his own article.

Rather, in Ulrich, to locate an article, that person must have access to a computer. It is that computer that provides the access to location data, not a card terminal. Even if the computer should be portable, like a Blackberry, there is still no suggestion in Ulrich, or Chung modified by Ulrich, for an interaction employing a house card to initiate and complete a searching function and to identify the location of a particular article.

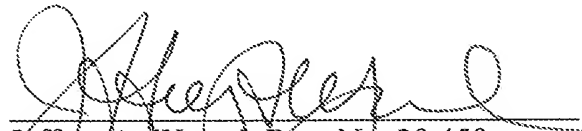
A fundamental requirement of establishing *prima facie* obviousness is that the combination of publications relied upon must disclose all of the elements of the claimed invention. Here, that requirement is not met because no combination of Chung and Ulrich could include anything equivalent to a positional informational management server programmed to search for the location of an article in response to the reading of a house card by one of the card terminals, based upon authentication of the house card and input of a tag ID, with the results of that search being sent to the card terminal where the request for the search is made.

In this Amendment three additional dependent claims are added. These claims are supported by the application as filed and are patentable at least because of their dependency from an allowable claim, claim 25. New claim 32 describes the issuance of a tag and association of the tag ID for that tag with the customer and the customer's room number in the hotel server. Information concerning the tag ID is obtained from the positional information management server, namely from the proximity detectors. This claim is supported by the complex flowchart of Figure 3 and the description in the patent application from page 24, line 9 through page 25, line 24. Claims 34 and 35 are related to each other and concern settlement, i.e., checkout, of a customer from the hotel. Upon the checking out and settlement of accounts, the positional information management server is instructed to erase, i.e., delete, data with respect to the tag of the customer who is checking out. Claim 34 confirms that certain data is erased with

respect to the tag ID, but that a current record is maintained that the tag is no longer active. That information is associated with the tag ID so that, in the future, the previous use of the tag ID can be recalled to detect an attempted use of a fraudulent tag with a tag ID that has already been employed. These two claims are supported in the original disclosure with respect to Figure 16 and the description from page 42, line 16 through page 43, line 2.

Upon reconsideration, the rejection of claims 25-31 should be withdrawn and all pending claims allowed.

Respectfully submitted,



Jeffrey A. Wyand, Reg. No. 29,458  
LEYDIG, VOIT & MAYER  
700 Thirteenth Street, N.W., Suite 300  
Washington, DC 20005-3960  
(202) 737-6770 (telephone)  
(202) 737-6776 (facsimile)

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JAW:ves